

Amendment to the Specification

Please replace the abstract with the following new abstract

Abstract

Human α_2 -antiplasmin (α_2 AP) is the major inhibitor of the proteolytic enzyme plasmin that digests fibrin. Two forms of α_2 AP circulate in human plasma: a 464-residue protein, which we have termed "pro"-form, or α_2 AP_{pro}, and an N-terminally-shortened 452-residue "activated"-form, or α_2 AP_{act}. The latter becomes crosslinked to fibrin by activated factor XIII about 5-fold more rapidly than α_2 AP_{pro} and makes fibrin resistant to digestion by plasmin. A new human plasma proteinase has been identified herein that cleaves the Pro12-Asn13 bond of α_2 AP_{pro} to yield α_2 AP_{act}. This enzyme is identified herein as Antiplasmin Cleaving Enzyme (APCE).